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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/750,048

12/31/2003

Jeffry Golden

42173-018

8958

29493 7590 06/14/2007
HUSCH & EPPENBERGER, LLC
190 CARONDELET PLAZA
SUITE 600
ST. LOUIS, MO 63105-3441

EXAMINER

MCKANE, ELIZABETH L

ART UNIT

PAPER NUMBER

1744

MAIL DATE

DELIVERY MODE

06/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/750,048

Applicant(s)

GOLDEN, JEFFRY

Examiner

Leigh McKane

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 59-73 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 59-68, 70 and 73 is/are rejected.
- 7) ☒ Claim(s) 69, 71 and 72 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 59, 61, 62, 67, and 73 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

All of the above referenced claims include the newly added limitation “having droplets greater than 50 μm in diameter.” The instant specification fails to provide support for this limitation.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 59 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blidschun et al. (US 4,680,163) in view of Bayliss et al. (“The Combined Effect of Hydrogen Peroxide and Ultraviolet Irradiation on Bacterial Spores”).

Blidschun et al. teaches a method of decontaminating a contaminated non-conducting surface wherein the method includes providing a conducting backing **13** for the non-conducting surface **15** and spraying an electrically charged photosensitizer (hydrogen peroxide) onto the contaminated surface **15**. See col.3, lines 34-44. Blidschun et al. is silent with respect to illuminating the sprayed surface with light having a wavelength of 200-320 nm.

Bayliss et al., however, discloses that the combination of ultraviolet light at 254 nm with hydrogen peroxide “markedly reduced the concentration and time required to produce a kill of 99.99%.” See Table 4 and page 269. For this reason, it would have been obvious to one of ordinary skill in the art to combine the step of UV irradiation with hydrogen peroxide contact in the method of Blidschun et al..

5. Claims 67 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kodera et al.

Kodera et al. teaches a method for decontaminating a contaminated surface. Kodera et al. teaches a method for decontaminating a contaminated surface. The method of Kodera et al. includes providing barrier **A,B,C,D** defining a treatment space and having an entrance and an exit therein, surrounding the contaminated object (packaging material) with the barrier by moving the object into the entrance, spraying a hydrogen peroxide solution onto the surface of packaging material, and illuminating the sprayed surfaces with light from light source **34**. Within the barrier section **B**, having an entrance adjacent **A** and an exit adjacent **C**, an air flow is established. Air entering the barrier with hydrogen peroxide mist through **13** flows toward the entrance adjacent **A** to exit through exhaust **14**. However, due to the vacuum induced at **11** and the fact that shield plates **44** do not create a perfect seal, the examiner submits that some air

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would have necessarily flow out of the entrance adjacent **A**. Moreover, air entering the barrier with hydrogen peroxide mist through **13** also flows toward the exit adjacent **C**. Again, as the shield plate **44** adjacent the exit **C** is not a perfect seal, some air will necessarily flow through the exit toward the exhaust **14**. Although not specifically disclosed by Kodera et al., it is clear from the disclosure thereof that the “sterilizing” UV lamps used are those operating at the convention UV sterilizing wavelength of 254 nm.

Allowable Subject Matter

6. Claims 61-66 and 69-73 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 1st paragraph, set forth in this Office action.

Response to Arguments

7. Applicant's arguments filed 4 April 2007 with respect to claims 59, 60, 67, and 68 have been fully considered but they are not persuasive.

With respect to claims 59 and 60, applicant attempts to eliminate Blidschun et al. as a reference by arguing that the production of and application of the mist of Blischun et al. is not “spraying.” It would seem that Applicant is using semantics to distinguish the instant invention. In response, the examiner notes that the definition of “spraying” requires only “to disperse a liquid in a mass or jet of droplets” and that a “spray” is defined as “a mass of dispersed droplets.” As Blidschun et al. clearly teaches dispensing a liquid as a mass of dispersed droplets, then Blidschun et al. meets the requirements of “spraying”.

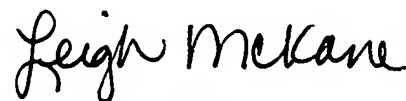
As to claims 67 and 68, Applicant submits that "Kodera does not disclose or teach a barrier "that defines the treatment space."" However, the barrier (sections A,B,C,D) of Kodera together all define a treatment space.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh McKane whose telephone number is 571-272-1275. The examiner can normally be reached on Monday-Friday (5:30 am-2:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Leigh McKane
Primary Examiner
Art Unit 1744